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Group Art Unit 1618
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CLAIMS:

1. (Currently Amended) A medical article comprising a release region, said release region comprising (a) a polymeric carrier comprising a first polymer and (b) drug loaded nanoparticles dispersed within said polymeric carrier, said drug loaded nanoparticles comprising: silicate particles comprising a layered silicate material; and a first therapeutic agent, wherein the first therapeutic agent is structurally associated with the silicate particles in that the first therapeutic agent occupies ~~inner~~ spaces between adjacent layers of the silicate material of each silicate particle to form a ~~reservoir~~ depot for the first therapeutic agent.

2. (Original) The medical article of claim 1, wherein said first therapeutic agent is a hydrophilic therapeutic agent and said first polymer is a hydrophobic polymer.

3. (Original) The medical article of claim 2, wherein said medical article is a vascular medical device, wherein said first therapeutic agent is halofuginone·HBr, and wherein said first polymer is a polyolefin-polyvinylaromatic block copolymer.

4. (Withdrawn) The medical article of claim 1, wherein said first therapeutic agent is a hydrophobic therapeutic agent and said first polymer is a hydrophilic polymer.

5. (Withdrawn) The medical article of claim 1, further comprising a second polymer.

6. (Withdrawn) The medical article of claim 5, wherein said polymeric carrier further comprises said second polymer.

7. (Withdrawn) The medical article of claim 5, wherein said nanoparticles further comprise said second polymer.

8. (Withdrawn) The medical article of claim 7, wherein said second polymer is hydrophobic and said first polymer is hydrophilic.

9. (Withdrawn) The medical article of claim 7, wherein said second polymer is hydrophilic and said first polymer is hydrophobic.

10. (Withdrawn) The medical article of claim 9, wherein said medical article is a vascular medical device, wherein said first therapeutic agent is halofuginone·HBr, wherein said first polymer is a polyolefin-polyvinylaromatic block copolymer, and wherein said second polymer is a hydrophilic polymer selected from hyaluronic acid, collagen, heparin, chrondroitin sulfate, phosphoro choline, dextran, and polyethylene oxide.

11. (Withdrawn) The medical article of claim 1, wherein said polymeric carrier further comprises said first therapeutic agent.

12. (Withdrawn) The medical article of claim 1, further comprising a second therapeutic agent.

13. (Withdrawn) The medical article of claim 12, wherein said polymeric carrier further comprises said second therapeutic agent.

14. (Withdrawn) The medical article of claim 13, wherein said first therapeutic agent is hydrophilic and said second therapeutic agents is hydrophobic.

15. (Withdrawn) The medical article of claim 12, wherein said nanoparticles further comprise said second therapeutic agent.

16. (Withdrawn) The medical article of claim 15, wherein said first and second therapeutic agents are hydrophilic.

17. (Original) The medical article of claim 1, wherein said release region is disposed over at least a portion of a medical article substrate.

18. (Original) The medical article of claim 1, wherein said medical article is an implantable or insertable medical device.

19. (Original) The medical article of claim 18, wherein said implantable or insertable medical device is adapted for implantation or insertion into the coronary or peripheral vasculature.

20. (Withdrawn) The medical article of claim 19, wherein said implantable or insertable medical device is adapted for implantation or insertion into the esophagus, trachea, colon, biliary tract, urinary tract, prostate or brain.

21. (Original) The medical article of claim 19, wherein said implantable or insertable medical device is selected from a catheter, a guide wire, a balloon, a filter, a stent, a stent graft, a vascular graft, a vascular patch, a shunt, an electrode, a heart valve, a circulation pump, and an intraluminal paving system.

22. (Original) The medical article of claim 19, wherein said therapeutic agent is selected from an anti-thrombotic agent, an anti-proliferative agent, an anti-inflammatory agent, an anti-migratory agent, an agent affecting extracellular matrix production and organization, an antineoplastic agent, an anti-mitotic agent, an anesthetic agent, an anti-coagulant, a vascular cell growth promoter, a vascular cell growth inhibitor, a cholesterol-lowering agent, a vasodilating agent, and an agent that interferes with endogenous vasoactive mechanisms.

23. (Original) The medical article of claim 1, wherein said layered silicate material comprises synthetic or naturally occurring smectite.

24. (Withdrawn) The medical article of claim 1, wherein said layered silicate material comprises a natural or synthetic silicate material selected from bentonite, aliettite, vermiculite, swinefordite, montmorillonite, yakhontovite, nontronite, beidellite, volkonskoite, stevensite, hectorite, saponite, laponite, sauconite, magadiite, kenyaite and ledikite.

25. (Original) A method of releasing a therapeutic agent to a patient comprising: (a) providing the medical article of claim 1; and (b) contacting said medical article with a patient.

26. (Withdrawn) A method of providing the medical article of claim 1 comprising:

providing a release-region-forming fluid comprising (a) said first polymer species and (b) said drug loaded nanoparticles; and

applying said release-region-forming fluid to a medical article substrate or to a releasable template.